

In the Claims

1. (original) A point-to-multipoint network arrangement comprising:-
 - a head-end station;
 - at least one subscriber station;
 - a point-to-multipoint network providing shared medium connectivity between each subscriber station and the head-end station;wherein each subscriber station is arranged to transmit data that has previously been segmented into packet-switched transport protocol packets, to the head-end station, using a time division multiple access protocol without the need to further segment the packet-switched protocol packets.
2. (original) A point-to-multipoint network arrangement according to claim 1 in which the packet-switched transport protocol employs packets formatted according to an Ethernet protocol.
3. (original) A point-to-multipoint network arrangement according to claim 1 in which the packet-switched transport protocol is arranged to carry Internet Protocol data.
4. (original) A point-to-multipoint network arrangement according to claim 1 in which the packet-switched transport protocol is arranged to carry unsegmented Ethernet frames .
5. (original) A point-to-multipoint network arrangement according to claim 1 in which the TDMA protocol employs frames each arranged to carry multiple packet-switched transport protocol packets.
6. (original) A point-to-multipoint network arrangement according to claim 1 in which the at least one subscriber station is arranged to periodically receive synchronisation signals transmitted from the head end-station.

7. (original) A point-to-multipoint network arrangement according to claim 6 in which differential time delays arising from differing path lengths between the head-end station and outstations are absorbed by including guard bands in the TDMA protocol.

8. (original) A point-to-multipoint network arrangement according to claim 1 in which the point-to-multipoint network is an optical network.

9. (original) A point-to-multipoint network according to claim 8 in which the optical network is a passive optical network.

10. (currently amended) A point-to-multipoint network arrangement according to claim 1 in which the point-to-multipoint network is one of a wireless network or and a high-speed copper network.

11. (original) A point-to-multipoint network arrangement according to claim 1 in which each subscriber station is allocated to one of a plurality of groups, each group transmitting on a distinct physical channel.

12. (original) A telecommunications access network comprising a point-to-multipoint network arrangement according to claim 1.

13. (original) A telecommunications access network comprising a passive optical network arrangement according to claim 1.

14. (original) A telecommunications network comprising a passive optical network arrangement according to claim 1.

15. (original) A head-end station for a point-to-multipoint network comprising at least one subscriber station, and a point-to-multipoint network providing shared medium connectivity between each subscriber station and the head-end station, the head-end station being arranged to receive from the at least one subscriber station data previously segmented into packet-switched transport protocol packets and transmitted using a time division

multiple access protocol without the packet-switched protocol packets having been further segmented.

16. (original) A telecommunications network comprising a head-end station according to claim 15.

17. (original) A method of operating a point-to-multipoint network arrangement comprising a head-end station, at least one subscriber station, and a point-to-multipoint network providing optical connectivity between each subscriber station and the head-end station, comprising the steps of:

transmitting upstream using a packet-switched transport protocol over a TDMA protocol configured to obviate segmentation of packet-switched transport protocol packets.

18. - 20 (cancelled)